Storms of 1905 – 1908

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Introduction.

The present report describes results of the author's continuing effort of seeking improvement of the historical knowledge of Atlantic tropical cyclones. The improved knowledge is planned to be used in determining more accurately the frequency variation of these storms during the second half of the nineteenth century and early this century. The present report covers the period 1905-1908. The storm documentation in Neumann et al. (1993) has already covered that period, but the study of individual storms corresponding to those years was undertaken by the present author in order to check storm tracks for correctness using information contained in other sources and, at the same time, trying to identify new storms to be added to the ones in the above mentioned publication.

Sources and Methods.

Sources that were used in checking the tracks in Neumann et al. (1993) were available cyclone lists such as those published in Tannehill (1938), Dunn and Miller (1960) and Mitchell (1924), books, reports and articles about the storms such as Sarasola (1928), Tucker (1982), Martinez-Fortun (1942), Cline (1975), Academia de Ciencias (1970), Weather Bureau (1907, 1908, 1909, 1910), and meteorological information contained in the Monthly Weather Review, the Historical Weather Maps and in sections of marine and general news published in newspapers such as The New York Times, The Times (London), the Daily Miami Metropolis and Diario de la Marina (Havana, Cuba). Each storm in Neumann et al. (1993) for the period 1905-1908 was checked against the above information sources and appropriate modifications were implemented for the tracks which were found to be in error. The above sources were also used in trying to identify new storms and some weather systems which seem to have had a possibility of having reached tropical storm intensity.

For each year, if new storms were documented, their tracks were combined with those of previously known storms after having applied the necessary corrections to the latter ones; then the storms were numbered in chronological order in accordance with the date they were first detected. Storm tracks for 1905-1908 are displayed on maps in Figs. 1 to 4. Estimated 7 A.M. (E.S.T.) positions were denoted by black dots along the tracks, the adjacent numbers indicating the day of the month. The month was indicated for only the starting day of each track and, in addition, for the first day of the month when a track was found to continue from one month to the next. Portions of the tracks corresponding to tropical storm intensity or to hurricane intensity were denoted by dashed lines or solid lines, respectively; in addition, the depression (dissipation) stage was denoted by asterisks and the extratropical stage was denoted by crosses. The above symbolism was made to be consistent with the one used in Neumann et al. (1993) for the years 1899-1950.

Results.

The detailed study of the storms for the period 1905-1908 is presented in the Appendix. The appendix presents 30 storms on a one-by-one basis. These storms are listed in Table 1. Note in the table that three new storms were found for the above mentioned period: 1 in 1906, 1 in 1907 and 1 in 1908. It should be indicated that one of the storms listed in Table 1 (Storm 8, 1906) resulted from the combination of two storms in Neumann et al., 1993 (Storms 7 and 8 in their publication). Some changes along the tracks were implemented for 24 out of the 28 previously known storms shown in Neumann et al. (1993) but, due to the fact that two storms in their publication were combined into one, Table 1 shows that tracks were modified for 23 out of 27 storms. Therefore, about 85 percent of the previous tracks were modified. This large percentage was associated with the use of Historical Weather Maps as a new source for checking storm tracks starting in 1899.

Table 1 List of Storms (1905-1908)

	Ident. #	New	Track
List No.	& Date(s)	Case	Modified
1	Storm 1, 1905 (Sept. 6-8)	No	Yes
2	Storm 2, 1905 (Sept. 11-16)	No	No
3	Storm 3, 1905 (Sept. 24-30)	No	No
4	Storm 4, 1905 (Oct. 3-13)	No	Yes
5	Storm 5, 1905 (Oct. 5-11)	No	Yes
6	Storm 1, 1906 (Jun. 8-14)	No	Yes
7	Storm 2, 1906 (Jun. 14-23)	No	Yes
8	Storm 3, 1906 (Aug. 22-25)	Yes	
9	Storm 4, 1906 (Aug. 25-Sept. 12)	No	Yes
10	Storm 5, 1906 (Sept. 3-18)	No	Yes
11	Storm 6, 1906 (Sept.20-29)	No	Yes
12	Storm 7, 1906 (Sept. 22- Oct. 2)	No	Yes
13	Storm 8, 1906 (Oct. 8-23)	No	Yes
14	Storm 9, 1906 (Oct. 14-17)	No	Yes
15	Storm 10, 1906 (Oct. 15-20)	No	Yes
16	Storm 11, 1906 (Nov. 5-9)	No	Yes
17	Storm 1, 1907 (Jun. 24-30)	No	Yes
18	Storm 2, 1907 (Sept. 19-23)	No	Yes
19	Storm 3, 1907 (Sept. 27-29)	No	Yes
20	Storm 4, 1907 (Oct. 17-19)	No	Yes
21	Storm 5, 1907 (Nov. 6-12)	Yes	
22	Storm 1, 1908 (Mar. 6-9)	No	No
23	Storm 2, 1908 (May 24-31)	Yes	
24	Storm 3, 1908 (Jul. 24-Aug. 3)	No	Yes
25	Storm 4, 1908 (Aug. 30- Sept. 2)	No	Yes
26	Storm 5, 1908 (Sept. 7-19)	No	Yes
27	Storm 6, 1908 (Sept. 16-18)	No	No
28	Storm 7, 1908 (Sept. 21- Oct. 7)	No	Yes
29	Storm 8, 1908 (Oct. 14- 18)	No	Yes
30	Storm 9, 1908 (Oct. 19-23)	No	Yes

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Captions

- Fig. 1. Storms of 1905. Estimated positions shown by black dots are for 7 A.M. (E.S.T.). Dashed lines denote portions of the tracks along which storms attained tropical storm status and solid lines denote portions of the tracks showing hurricane intensity. Depression (dissipation) stages are denoted by asterisks and extratropical stages are denoted by crosses.
- Fig. 2. Same as Fig. 1 but for 1906.
- Fig. 3. Same as Fig. 1 but for 1907.
- Fig. 4. Same as Fig. 1 but for 1908.